U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8909

FULL COMPLIANCE EVALUATION REPORT
AIR ENFORCEMENT SECTION

I. GENERAL INFORMATION

Inspection Date:	July 2, 2003
Compliance Monitoring Category:	Full Compliance Evaluation
Company Name:	Anvil Knitwear, Inc.
Address:	P.O. Box 367 850 Warren Wilson College Road Swannanoa, North Carolina 28778
Telephone Number:	(828) 298-2280
Facility Personnel/Title:	Steve D. Pegg, Director of Human Resources James Gallion, Maintenance Manager
State Personnel/Title:	Melanie Pitrolo, Engineering Supervisor
EPA Personnel/Title:	Denis B. Kler, Environmental Engineer
Report Prepared by:	Denis B. Kler

II. FACILITY INFORMATION

A. Process Description

The Anvil Knitwear facility is a textile dyeing manufacturing plant. The facility produces approximately 850,000 pounds of dyed fabric per week, and approximately 530 persons are employed at the facility.

The process begins with the knitting of cotton and poly-cotton yarn into a circular form. The knitted material is then dyed in one of the dye machines. After the material is dyed it is then moved to the finishing area to remove excess water, and to apply a softener to the fabric. From the finishing area the material is put through one of the natural gas dryers. The dried material is

then sent through a compactor system, which is used to control shrinkage. Then the compacted material is packaged for shipment.

B. Regulatory Requirements

Anvil Knitwear is classified as a synthetic minor for Title V purposes. The company currently operates under permit number 11-716 issued on July 13, 2001, and permit number 11-716-02-C issued on January 14, 2002. Permit number 11-716 contains the operational restrictions to keep the sulfur dioxide emissions below the Title V thresholds, and permit number 11-716-02-C was issued to the company to operate a Johnston Boiler that is subject to 40 CFR Part 60 Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. Copies of the permits are located at the local office.

C. Compliance History

Currently there are no federal enforcement cases against the Anvil Knitwear facility located in Swannanoa, North Carolina.

III. PRE-INSPECTION BRIEFING

The inspection team arrived at the facility around 10:30 am (EST). We presented our credentials and identification to Mr. James Gallion and Mr. Steve Pegg, and announced our intentions to conduct a compliance evaluation of the facility. The inspection team supplied Mr. Gallion and Mr. Pegg with a list of records the team wanted to review. We informed Mr. Gallion and Mr. Pegg that we would begin the inspection, while the records were gathered.

The inspection team inquired if the company had any refrigeration systems that contained 50 or more pounds of any Class I or Class II substances. Mr. Gallion indicated that the company had three appliances that contained more than 50 pounds of refrigerant. Mr. Gallion stated that the maintenance persons clean the coil on the appliances, but any work on the refrigeration system is done by a contractor, Mechanical Air located in Fletcher, North Carolina. Mr. Gallion also stated that the company does not perform any service on motor vehicle air conditioners.

Mr. Pegg indicated that the Anvil Knitwear facility located in Kings Mountain, North Carolina, had closed down, and that the operations were moved to the Swannanoa facility. Mr. Pegg also indicated that the company may move a boiler from the Kings Mountain facility to replace the older Keeler boiler at this facility. He stated that a permit application would be submitted to Western North Carolina Regional Air Quality Agency (WNCRAQA).

Mr. Pegg also indicated that the company has submitted a Title V application to WNCRAQA, but the company requested WNCRAQA to not begin drafting the Title V permit.

IV. FACILITY WALK THROUGH

The company has twenty-eight dye machines with capacities ranging from 80 pounds to 3,000 pounds. The dye machines use about 1.0 to 1.2 million gallons of water per day. Mr.

Gallion indicated that some new dye machines from Kings Mountain were being installed to help get production up to 1,000,000 pounds per week.

There are six dryers used at the facility. One is heated with steam and the rest are heated with natural gas. All the dryers that burn natural gas have a heat input rate below 2.0 million BTU/hour (mmBTU/hour).

Keeler Boiler

The Keeler Boiler is permitted under permit number 11-716, and is subject to the local regulations. The permit indicated that the boiler has a heat input rate of 52.8 mmBTU/hour capable of firing either number six fuel oil or natural gas, and was installed prior to 1967. No control device is associated with this boiler.

Observations

The boiler plate indicated that the boiler was capable of firing 2,500 pounds of fuel oil per hour, and 31,280 cubic feet of gas per hour. The boiler was not operating during the inspection. Mr. Gallion stated that the boiler was down due to brick problems.

Babcock & Wilcox Boiler

The Babcock & Wilcox Boiler is permitted under permit number 11-716, and is subject to the local regulations. The permit indicated that the boiler has a heat input rate of 51.3 mmBTU/hour and is capable of firing either number six fuel oil or natural gas. No control device is associated with this boiler.

Observations

The boiler plate indicated that boiler was built in 1980, and had a steam production capacity of 40,000 pounds per hour. The boiler was firing number six fuel during the inspection. There were some visible emissions from the boiler's stack, but the visible emission appeared to be below the 20% limit. An EPA Method 9 could not be taken due to an unfavorable background conditions. Mr. Gallion stated that the company would try to correct this.

Johnston Boiler

The Johnston Boiler is permitted under permit number 11-716-02-C, and is subject to 40 CFR Part 60 Subpart Dc. The permit indicated that the boiler has a heat input rate of 40.1 mmBTU/hour and is capable of firing either natural gas or number two fuel oil. No control device is associated with this boiler.

Observations

The boiler plate showed that the boiler was built in 1993, has a heat input rate of 50.3 mmBTU/hour on gas, and can fire 330.6 gallons per hour of number fuel oil. During the inspection, the boiler was firing natural gas and no visible emissions were noted. Mr. Gallion stated that the number two oil fuel tank had not been installed, so the boiler can only be fired with natural gas. There appears to be a discrepancy between the permitted heat input rate and the boiler plate heat input rate. However, the boiler would still be subject to the regulations in 40 CFR Part

60 Subpart Dc. WNCRAQA indicated that this discrepancy would be addressed in the next permit.

It should be noted that permit 11-716-02-C does not require the company to conduct an initial Method 9 performance test on the boiler. Regulation 40 CFR Part 60.45c(a) requires the owner of an affected facility subject to an opacity standard to conduct an initial performance test. Therefore, the company is required to conduct a Method 9 test to verify compliance with the 20% opacity limit while firing the number two fuel oil. This test should be conducted within 180-days after the boiler is capable to burn number two fuel oil. WNCRAQA indicated that this requirement was added to the permit issued on July 14, 2003.

V. RECORDS REVIEW

During the inspection, the inspection team requested various documents that the company is required to maintain on-site. Mr. Pegg was unable to locate some of the records, and it was agreed that the records would be sent to EPA by July 10, 2003. The records were submitted with a letter dated July 10, 2003. The company is required to maintain the records on site or at least have the records available during the inspection.

A. Permit Number 11-716

Condition B.5. requires the company to maintain records of volatile organic compound (VOC) and hazardous air pollutant (HAP) usage.

Observations

The records were not available during the inspection. Mr. Pegg stated that the records would be sent to EPA.

Mr. Pegg hired a consultant to calculate the VOC and HAP emissions. The consultant reported that the company emitted 3,395 pounds of glycol ether in 2001, and 3,960 pounds of glycol ether in 2002. Ms. Pitrolo, WNCRAQA, indicated that this condition would be removed from the permit.

Condition B.6. requires the emissions from the facility to be less than 100 tons per year of any criteria air pollutant.

Observations

The records were not available during the inspection. Mr. Pegg stated that the records would be sent to EPA. According to the records that were submitted to EPA, the company emitted approximately 54 tons of sulfur dioxide from April 2002 through March 2003, and approximately 17 tons of nitrogen oxides from April 2002 through March 2003.

Condition B.7. limits the sulfur content in the number six fuel oil to less than 1.8%.

Observations

The records indicated that the company received nine shipments of number six fuel oil with a sulfur content above 1.8% in March 2003. The sulfur content limit is used to keep the sulfur dioxide emissions below Title V threshold.

Condition B.8. of permit number 11-716 limits the amount of number six fuel oil to 630,000 gallons in any twelve consecutive months.

Observations

The records were not available during the inspection. Mr. Pegg stated that the records would be sent to EPA. According to the records that were submitted, the company used 374,341 gallons of number six fuel oil from April 2002 through March 2003.

Condition B.9. requires the company to submit an annual report by February 15 of the following year summarizing the VOC and HAP emissions for the previous year.

Observations

The records were not available during the inspection. Mr. Pegg stated that the records would be sent to EPA.

WNCRAQA indicated that the VOC and HAP report was submitted on April 18, 2003. WNCRAQA decided not to take enforcement action because the emissions were below 2 tons per year. The VOC and HAP records and reports will be removed from the permit.

Condition B.10. requires the company to submit an annual report by February 15 of the following year containing fuel oil analysis and the quantity of number six fuel oil used.

Observations

The records were not available during the inspection. Mr. Pegg stated that the records would be sent to EPA.

WNCRAQA indicated that the fuel oil report was submitted on January 14, 2003.

B. Permit Number 11-716-02-C

Condition B.4. requires the company to obtain a fuel supplier certification for each shipment of fuel oil received (40 CFR Part 60.48c(e)(11) and 60.48c(f)).

Observations

The number two fuel oil tanks have not been installed, so the company has not received any fuel oil shipments.

Condition B.5 requires the company to submit notification to WNCRAQA of the following: (a) date construction of B3 (Johnston Boiler) actually began, including annual capacity factor on all fuels; (b) anticipated date of startup of B3; and (c) actual startup date of B3.

Observations

These notifications were not available during the inspection. Mr. Pegg stated that the notifications would be sent to EPA.

The July 10, 2003, letter indicated that construction began on February 20, 2002; that the WNCRAQA was notified by phone that the boiler started up on natural gas on August 8, 2002; and that construction has not been fully completed because the number two fuel oil tank has not been installed. Copies of the written notifications were not submitted with the July 10, 2003, letter.

As required by 40 CFR Part 60.48c(a) and 40 CFR Part 60.7(a), the company is required to submit the following: (a) written notification of the date construction of the affected facility commenced postmarked no later than 30 days after such date, which includes the design heat input capacity, the identification of fuel to be combusted, and the annual capacity factor; (b) written notification the date of anticipated startup of the affected facility; and (c) written notification of the actual date of initial startup of the affected facility postmarked within 15 days after such date.

Condition B.7. restricts the amount of fuel oil the facility shall consume in any consecutive twelve month period to 630,000 gallons of number six fuel oil and 155,000 gallons of number two fuel oil.

Observations

The company burned 374,341 gallons of number six fuel oil from April 2002 through March 2003. The company has not burned any number two fuel oil because the storage tanks have not been installed.

Condition B.8. requires the company to keep records of the amount of fuel oil received, the fuel supplier certifications for each shipment and the amount of fuel oil burned each day. The condition also requires the company to submit semi-annual reports covering the periods of July 1 through December 30, and January 1 through June 30.

Observations

Mr. Pegg stated that these reports were not submitted because the Johnston boiler has not burned any number two fuel oil since it began operation.

VI. AREAS OF CONCERN

1. The company received several shipments of number six fuel oil that had a sulfur content greater than 1.8%. This appears to be a violation of condition B.7. of permit number11-716.

2. The company appears to have not submitted written notification for the date construction began on the Johnston Boiler, the date of anticipated startup of the boiler, and the date of actual startup of the boiler. This appears to be a violation of 40 CFR Part 60.48c(a), 40 CFR Part 60.7(a), and condition B.5. of permit number 11-716-02-C.

3. During the inspection of the facility, the inspection team requested various records that the company is required to maintain. The records were not readily available during the inspection and had to be submitted to EPA at a later date. The company should have the records available during the inspection.

4. In permit number 11-716-02-C lists the Johnston Boiler to have a heat input rate of 40.1 MMBTU/hour. However, the boiler plate indicated that the boiler had a heat input rate of 50.3 MMBTU/hour. This should be corrected in the permit.